

***AN ARCHAEOLOGICAL SURVEY
FOR THE PROPOSED CLYDE CITY PARK
CALLAHAN COUNTY TEXAS***

Antiquities Permit 4783



By

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***Brazos Valley Research Associates
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AN ARCHAEOLOGICAL SURVEY FOR THE CLYDE CITY PARK
IN NORTH-CENTRAL CALLAHAN COUNTY, TEXAS

BVRA Project 08-01

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ABSTRACT

An archaeological survey of a proposed city park in north-central Callahan County, Texas was performed on January 28, 2008 by Brazos Valley Research Associates for the City of Clyde under Antiquities Permit 4783. The project area was investigated by shovel testing and backhoe trenching. The footprint for the park is 6.2 acres. Four shovel tests and nine backhoe trenches dug through clay loam and caliche to depths of 100 cm to 180 cm were generally negative in terms of producing cultural materials, and no artifacts were collected. One backhoe trench yielded two modern brick fragments and one white ware ceramic sherd. These items may be associated with the remains of a former filling station that once was present in the northern end of the project area. It was destroyed prior to the acquisition of the park by the City of Clyde. The entire 6.2-acre tract has been greatly disturbed during the demolishing of the filling station and tree removal. It is very unlikely that intact cultural materials are present anywhere in the project area. It is recommended that construction of the park be allowed to proceed as planned by the City of Clyde. Copies of the report are on file at the Texas Historical Commission, Texas Archeological Research Laboratory, Brazos Valley Research Associates, and the City of Clyde.

ACKNOWLEDGMENTS

I am appreciative of the assistance provided by others during this project. Kelly Rosenbaum of Jacob & Martin, Ltd. was the Project Manager, and his firm provided the project area maps. The Project Engineer for Jacob & Martin, Ltd. was Ken Martin. The City Administrator (Tim Atkinson) signed the permit application as the representative of the landowner, and Kevin Hagan (Public Works Director) provided two workers to assist with the fieldwork. I am grateful to Brad Faircloth and Chris Johnson for their help. Terry Davis, a former Public Works employee for the City of Clyde, shared his in knowledge of the past condition of the project area. Jean Hughes checked the site records at the Texas Archeological Research Laboratory for previously recorded sites in the project area and vicinity. The figures and cover were prepared by Lili G. Lyddon of LL Technical Services.

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INTRODUCTION

The City of Clyde plans to construct a city park in the city limits of Clyde, Texas in Callahan County, Texas (Figure 1). Planned improvements consist of playgrounds, parking area, washers courts, horseshoe pitch courts, picnic shelters, lighting, walking-jogging trail, pedestrian crosswalk, pedestrian bridges, sewer line, and landscaping. The maximum depth of subsurface disturbance will be four feet in the area of the sewer line and possibly the creek crossing for the pedestrian bridges. The project area is depicted on the USGS topographic map Baird (3299-133) (Figure 2). Callahan County is located in a part of Texas that has received little attention by archaeologists and only 19 recorded sites are present on the Archeological Sites Atlas. The Texas Historical Commission requested that a cultural resources survey be performed by a professional archaeologist prior to the construction of the park. In order to comply with this request, the City of Clyde retained Brazos Valley Research Associates of Bryan, Texas to conduct this investigation. The project number assigned by BVRA is 08-01.

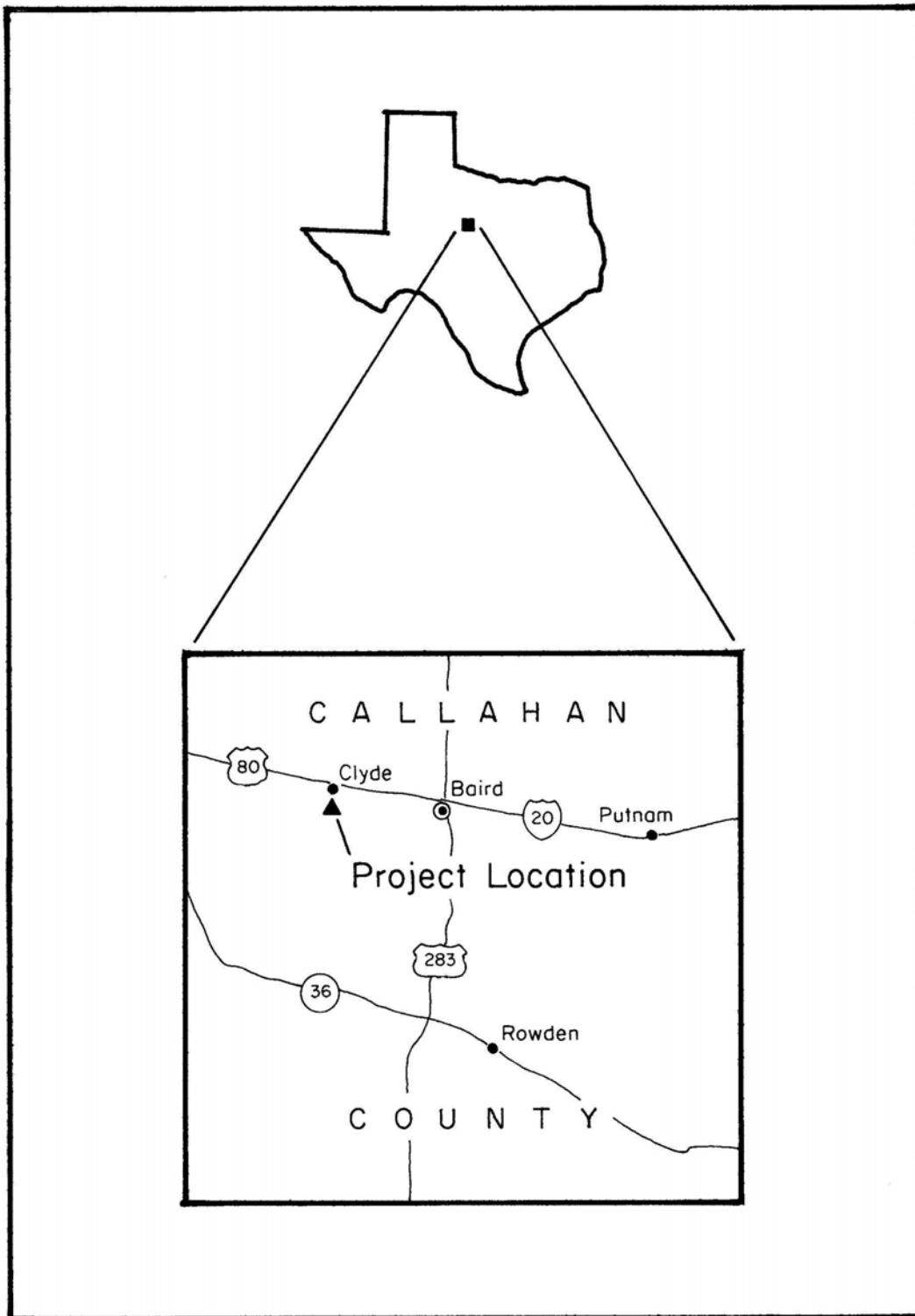


Figure 1. General Location

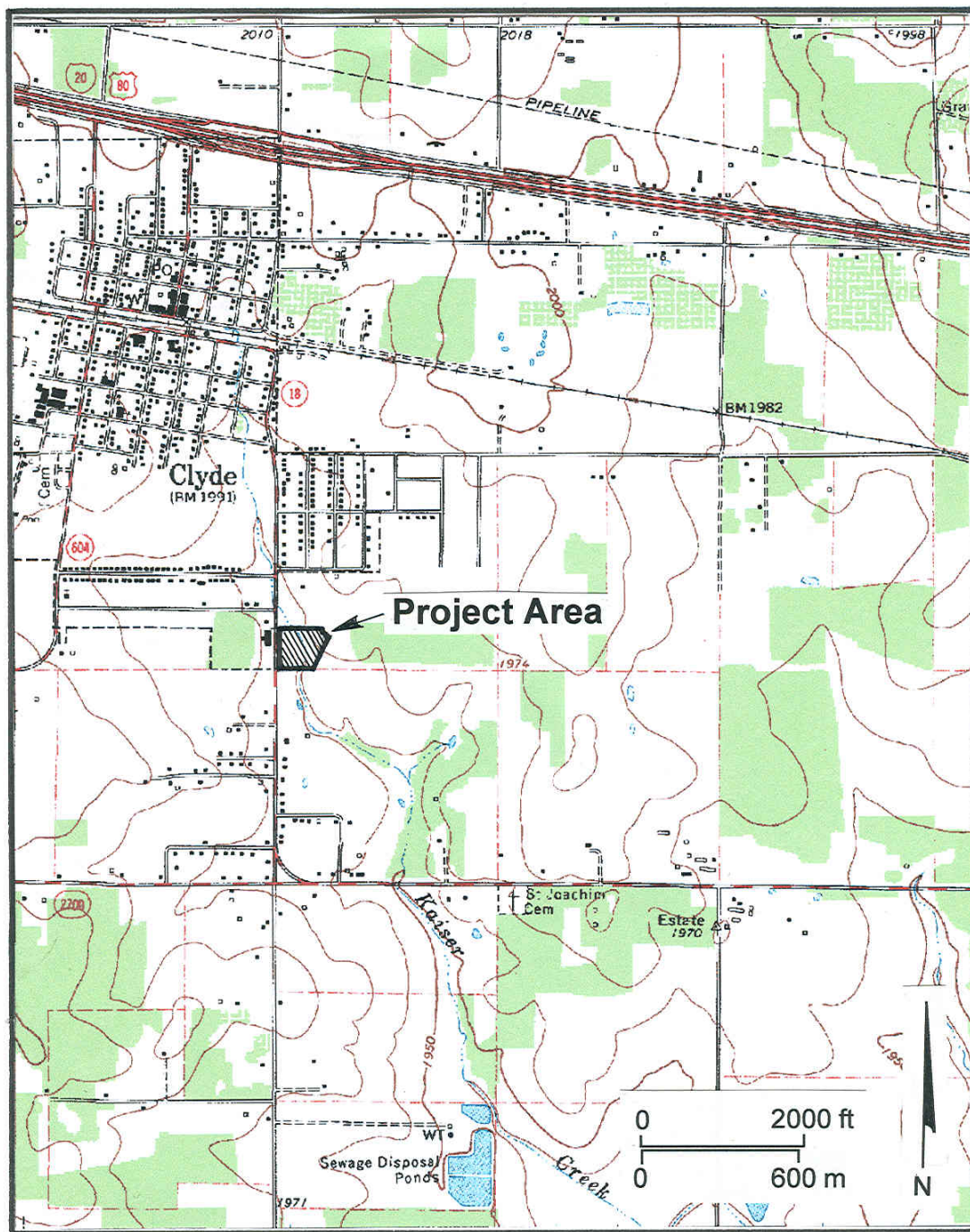


Figure 2. Project Area on Topographic Map Baird

ENVIRONMENTAL SETTING

The project area is located within the Central Texas section of the Great Plains physiographic province as defined by Fenneman (1931). According to Blair (1950), Callahan County is located in the Mesquite Plains District of the southern portion of the Kansan Province that extends from the Caprock Escarpment to the Western Cross Timbers and south to the Edwards Plateau. The reader is referred to Volume I (Stratigraphy) of the Geology of Texas by Sellards et al. (1932) for a more in-depth discussion of the geology of this area. Data taken from the *Texas Almanac* for 1984-1985 (Kingston and Harris 1983) state that the county receives 25.2 inches of annual rainfall. Temperatures vary from a January minimum temperature of 32 degrees Fahrenheit to a July maximum temperature of 96 degrees Fahrenheit. The project area is located in a 100-year floodplain upland setting with elevations varying from 1959 feet above mean sea level at the creek to 1967 feet above mean sea level away from the creek. The project area is located along the Callahan Divide that bisects the Rolling Plains. The high mesas of the Callahan Divide are erosion-resistant remnants of the once continuous Edwards Plateau limestone that stretched from the cap of the Llano Estacado eastward to the Comanche Plateau (Fenneman 1931). Buffalo Gap is one of the passes through the Callahan Divide, and this gap is located just to the west of the project area. The Rolling Plains consist of smooth plains dissected by numerous streams and creeks. Soils in this area formed from outwash sediments and Permian sandstone, clay, and shale. The streams have narrow, alluvial soils that were deposited by water (Thoms 2000:11). In prehistoric times bison were plentiful and were a major food source along with deer and small game. Overall, the site of the proposed park is flat with little variation in elevation. The entire project area was covered with grass that has been mowed and scattered oak trees (Figure 3). The nearest water source is Kaiser Creek that bisects the project area in a north-south direction (Figure 4).

According to the soil survey for Callahan County (Clower 1981), the major soil type in the project area is described by Clower (1981:Sheet 13) as Abilene loam (soil type 1), 0 to 1 percent slopes. In the extreme northeast corner of the park there is an area of Pedernales Fine Sandy Loam (soil type 31), 1 to 3 percent slopes. In a typical profile, the Abilene Loam has a surface layer of dark grayish-brown loam about nine inches thick. It is underlain by a subsoil of dark brown clay loam and brown clay loam to a depth of 32 inches. The lower part is a calcareous clay loam to a depth of 80 inches. In a typical profile, the Pedernales Fine Sandy Loam has a surface layer of brown fine sandy loam about seven inches thick. The subsoil is a red sandy clay that occurs between 40 inches and 53 inches. The underlying layer is a reddish-yellow calcareous sandy clay loam to a depth of 70 inches.



Figure 3. View of Project Area (looking south)



Figure 4. View of Kaiser Creek (looking north)

ARCHAEOLOGICAL BACKGROUND

General

The project area is located in a region referred to by Biesart et al. (1985) as the Lower Plains Cultural Geographical Region, by Powell and Creel (1989) as part of the North Central Texas Archeological Region, and by Brown et al. (1982) as on the border between the two. According to Krieger (1946), the cultural patterns in this region tend to mirror those found to the east more than those identified farther west in the high plains of the Llano Estacado. Since no defined culture sequence has been established for the Lower Plains cultural unit, researchers are forced to borrow the sequences defined in nearby regions such as Central Texas or North Central Texas.

Cultural chronologies for the North Central Texas area have been presented by Brown (1987), Krieger (1946), Prikryl (1987), and Skinner and Gallagher (1974). Chronologies for Central Texas have been prepared by Prewitt (1981, 1985) and Carlson et al. (1986). Although there is some difference in the terminology used by these researchers, they all agree that the last 10,000 to 12,000 years of prehistory and history for the area can be divided into four major temporal periods. These are Paleo-Indian (12,000 Before Present [B.P.] to 8000 B.P.); Archaic (8000 B.P. to 1250 B.P.); Late Prehistoric (1250 B.P. to 300 B.P.); and Historic (300 B.P. to Present

Even though few sites in Callahan County have been subjected to more than survey level investigation, it is apparent that the area was occupied from circa 11,500 B.P. through the Historic Indian and Anglo-American periods (Powell and Creel 1989:10). Possibly the oldest remains in the area have been found at the Gibson site (41TA1) in adjacent Taylor County. This is a deeply stratified site along Elm Creek containing artifacts dating to the Paleo-Indian period (Leighton 1936; Ray 1940, 1941, 1945; Sayles 1935). Another early site is McLean (41TA29), a stratified site with archaeological remains dating from Paleo-Indian through the Historic period (Bryan and Ray 1938; Ray 1930, 1935).

The majority of known prehistoric sites in the general area date to the Archaic and Late Prehistoric stages. They usually consist of burned rock middens, hearths, or lithic scatters near intermittent and permanent streams. In some cases, sites have been found beneath alluvial sediments that underlie the modern surface. Other sites in the area are lithic workshops, quarry sites, and isolated burials in rock crevices or beneath cairns.

Powell and Creel (1989:10) state that comparatively “few sites with Historic Indian remains are recorded in the region, although many might exist.” It is their opinion that most of the known Historic Indian sites are individual burials probable attributable to Apache, Comanche, or Kiowa Indians. Two known Historic Indian sites in the area are located in adjacent Taylor County. They are 41TA29 where an iron arrow point was found (Sayles 1935) and 41TA111 where a burial was found in a rock crevice with glass beads (Sayles 1935).

The Historic period is represented by a wide variety of sites. Fort Phantom Hill was established in 1851 about 15 miles north of present-day Abilene to protect the advancing American frontier. In 1858, the ruins of the abandoned fort were used as a way station on the Butterfield Trail Overland Mail Route (Richardson et al. 1988:169; Conkling and Conkling 1947). This trail extended southwest from Fort Phantom Hill about two miles northwest of what is now Dyess Air Force Base. Fort Griffin was established in 1867 to the northeast of Abilene and was active during the Indian Wars of 1871 to 1874 (Rister 1969). Anglo-American settlement in the Abilene area was not well established until the late 1870s (Fox 1983). With the beginning of permanent settlement, towns were created, and the Indians were forced to move. Many historic sites in rural areas are reminders of ranching activities in an area where cattle were the major industry.

PREVIOUS INVESTIGATIONS

Few projects by professional archaeologists have been conducted in Callahan County. The first sites to be documented were by E. B. Sayles in 1928 and 1930. Sayles (1935), working for The University of Texas at Austin, traveled about the state locating and recording archaeological sites. There is no record that he conducted formal testing or excavation. Rather, he collected artifacts and plotted site locations on highway maps. Later, these locations were transferred to USGS topographic quadrangles and given official site trinomials by the staff at the Texas Archeological Research Laboratory. In Callahan County, he visited six sites (41CA1 – 41CA6). Very little data are present on the abbreviated site forms. Five of these sites are described as “camps” with no mention of age or kinds of artifacts collected. Site 41CA6 is described as an “extensive workshop” with no evidence of a camp, and site 41CA1 mentions the presence of mastodon bones along Lytle Creek “without indication of human association.”

The next three sites to be recorded in the county (41CA7 – 41CA9) were documented by R. E. Forrester who collected artifacts from these areas between 1937 and 1955. The site forms, which were completed in 1993, do not mention any subsurface excavation. Therefore, it is assumed that his work was restricted to surface collecting. These three sites are described as lithic scatters with hearths. Site 41CA7 yielded *Clovis* points found eroding from the surface and a full range of Archaic specimens such as manos, seed-slabs, dart points, blades, scrapers, graters, gouges, cores, perforators, Spokeshave, hematite pendant, corner-tang knife, and fist axe. Arrow points were also found that would date this site to the Late Prehistoric Stage. Site 41CA8 also contains artifacts dating to the Archaic and Late Prehistoric stages. The artifact assemblage is much the same as that found at 41CA7 except at this site a hematite celt was recovered. Site 41CA9 yielded dart points and arrow points along with blades, graters, scrapers, and spokeshaves. Sites 41CA16 and 41CA17 were also visited by Forrester. Site 41CA16 was visited between 1940 and 1947, but no date for site 41CA17 is mentioned on the site form. Site 41CA16 It is a campsite with a lithic scatter and burned rock dating to the Archaic and Late Prehistoric stages. Artifacts collected include a *Bulverde* dart point and arrow point types *Fresno*, *Granbury*, *Keota*, *Perdiz*, and *Scallorn*. Other artifacts found were a mussel opener, blade graters, scrapers, and a perforator. Site 41CA17 is an open campsite with lithic scatter. It dates to the Archaic and Late Prehistoric stages. Artifacts collected include dart point types *Ellis*, *Fairland*, *Williams*, and *Zephyr* and arrow point types *Fresno*, *Granbury*, *Moran*, *Perdiz*, and *Scallorn*. Other artifacts include a blade and a *Harahey* knife. The location of his artifacts is not known since he is deceased.

The first sites to be recorded by professional archaeologists were the result of a survey by Hicks and Company in 1994. The project was related to a flood retention structure that was being proposed by the Soil Conservation Service (Davis and Guy 1995). This study identified and recorded six sites (41CA10 – 41CA15). The site types include prehistoric campsites with burned rock middens (41CA10 – 41CA12), prehistoric campsites with no associated middens (41CA13 – 41CA14), and a lithic procurement site (41CA15). The age of these sites range from Archaic to Late Prehistoric. Sites 41CA10 – 41CA13 are listed on the site forms as eligible for listing in the National Register of Historic Places and for designation as a State Archeological Landmark. Site 41CA14 is listed on the site form as eligible for listing in the National Register of Historic Places but not for designation as a State Archeological Landmark. The campsites are located on canyon rims and alluvial terraces and benches, while the lithic procurement site is located in an upland setting.

In 2000, sites 41CA18 and 41CA19 were recorded by Roger Klein (2000) of Mesa Field Services in Carlsbad, New Mexico during a survey for the Taylor Electric Cooperative Potosi Transmission Line. Site 41CA18 is described as an unknown prehistoric site consisting of a disperse scatter of chipped stone and tools. The artifacts observed include four core reduction flakes and twenty tested cobbles. The nearest water source is an intermittent stream. No shovel tests or other forms of subsurface investigation were conducted. The artifacts were analyzed in the field and not collected. It is recommended to be not eligible for listing in the National Register of Historic Places because “no substantial research questions can be answered by additional investigations.” Site 41CA19 is described as an unknown prehistoric site consisting of a disperse scatter of chipped stone and tools with no diagnostic artifacts present. The nearest water source is an intermittent stream. No shovel tests or other forms of subsurface investigation were conducted. A surface collection was taken from a 10 m x 10 m sample unit. This site is not considered to be significant because of the extreme disturbance observed.

Two of the sites (41CA13 and 41CA14) found by Hicks & Company in 1994 were tested in 1996 by archaeologists from this firm (Karbula 1997). Testing of site 41CA13 revealed the presence of a well preserved annular or ring midden with associated faunal remains and a sizeable lithic assemblage as well as charcoal and mussel shell. The researchers believe the site may date entirely to the Post-Archaic of Central Texas or to the transition from Woodlands or Plains societies on the Southern Great Plains. Site 41CA14, however, contained a low density of cultural materials which were scattered and out of context. No intact features or significant activity areas were identified. Therefore, site 41CA13 was considered to be eligible for nomination to the National Register of Historic Places. On the other hand, site 41CA14 was not viewed as significant and further work was not recommended.

Data recovery at 41CA13 was obtained by Paul Katz and Susana Katz (2002) in 1999. This investigation consisted of a 4 x 4 meter block, two smaller 2 x 2 meter blocks, and three backhoe trenches. In all, 29.02 square meters of soil was removed by hand, and 22.13 square meters of soil was removed by machine. This study determined that a small and sporadic Archaic Stage existed based on the presence of eight dart points. Four radiocarbon dates and the presence of arrow point types *Alba* and *Scallorn* indicate that the burned rock ring was constructed in Late Prehistoric times (A.D. 600 – A.D. 800-1200). This site was probably occupied during the spring and early summer and was used mainly as an animal processing site. Later (circa A.D. 1200 – A.D. 1600-1700), the site was reoccupied, and the burned rock ring feature was reused.

The nearest large survey to the current project area was conducted by Molly Godwin (2006) to the northwest in Callahan and Shackelford counties. This project covered 33.2 linear miles (491.8 acres) and preceded construction of 100 wind turbine locales. No sites were found, and it was recommended that the project be allowed to proceed as planned.

A major study for the area is a survey conducted at Camp Barkeley by Texas A&M University (Thoms 2000). In all, 1050 acres were examined, and three lithic scatters (41TA162, 41TA228, and 41TA229) were recorded. It was learned that the Callahan Divide is best known archaeologically as a major source area for Edwards chert. The upper mesa area was found to contain hundreds of concentrations of lithic debitage that resulted from reduction of tabular and nodular chert that erode from the limestone bedrock and alluvium below it (Thoms 2000:iii). Projectile points found on the mesa top indicates that the area has been utilized for at least 9000 years.

METHODS

Prior to entering the field, a records check for previously recorded sites in or near the project area was conducted by Jean Hughes at the Texas Archeological Research Laboratory. No recorded sites were found, and only one archaeological survey was identified. The field investigation was conducted on January 28, 2008. Before conducting subsurface exploration, the surface was examined for evidence of cultural materials. Unfortunately, the entire area was covered with grass making surface visibility impossible. There was an exposed area along the bank of the creek, and this area was closely examined. The field survey began with the excavation of shovel tests. It soon became apparent that this was going to be a very slow process due to the hardness of the soils. After digging four shovel tests, we brought in a backhoe and dug nine backhoe trenches. The trenches allowed us to view a greater area and dig to caliche that predates human occupation. Each backhoe trench was dug at least 30 cm into the caliche stratum. All excavated soil from the shovel tests was passed through ¼ inch hardware cloth, and selected samples of soil from the backhoe trenches were examined as well. Shovel test data appear in Appendix I, and backhoe trenches data appears in Appendix II. Profiles of four of the backhoe trenches appear in Appendix III. The location of each test and backhoe trench was measured from a fixed point on the landscape and plotted on a field map that was redrawn for this report (Figure 5). This project was also documented through field notes and a digital camera. Figure 6 is an example of the backhoe trenches excavated, and Figure 7 is an example of the shovel tests excavated. Two modern brick fragments and a white ware ceramic fragment were found in Backhoe Trench 1 that was expanded to a width of 24 inches because of the presence of cultural materials. No additional artifacts were observed, and the brick fragments and ceramic sherd were not collected. One white ware ceramic fragment was observed on the surface in the disturbed bank of the creek on the opposite side of Backhoe Trench 1. It was not collected. No backhoe trenches were excavated on the north side of trenches 8 and 9 because of the presence of a buried sewer line.

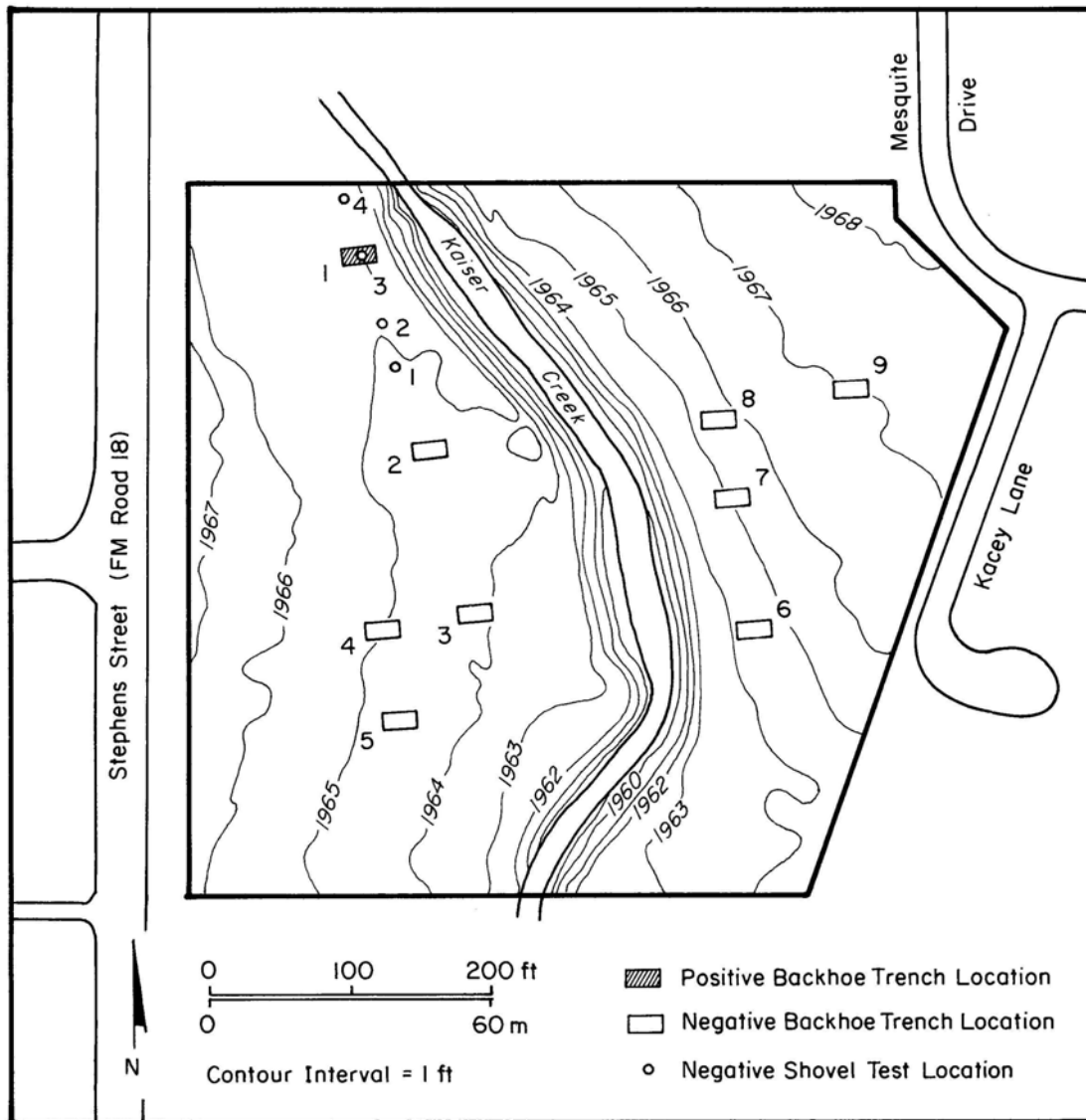


Figure 5. Shovel Tests and Backhoe Trenches



Figure 6. Backhoe Trench 8



Figure 7. Shovel Test 4

RESULTS AND CONCLUSIONS

Literature Review

The records check at the Texas Archeological Research Laboratory revealed that no professional investigations have been conducted in the project area. According to the Archeological Sites Atlas, only 19 sites have been recorded in Callahan County. Eleven of these were documented by individuals and later recorded by staff members at the Texas Archeological Research Laboratory. The rest of the sites were recorded by professional archaeologists as a result of small area surveys. Several sites are considered to be eligible for listing in the National Register of Historic Places or designation as a State Archeological Landmark. Only two sites (41CA13 and 41CA14) have been exposed to a testing or mitigation (see *Previous Investigations* above).

Local Interviews

According to Terry Davis, a former public works employee, the property was thickly wooded when it was acquired by the city. Two summers were spent removing trees and brush to make the area suitable for use as a park. Trees and roots were removed from the ground causing a great amount of disturbance to the subsurface. In the area of Backhoe Trench 1 where recent trash was found there was a filling station, but it has been completely removed. In summary, the entire project area has been disturbed to the point that it is highly unlikely that any intact cultural materials are present.

Field Survey

Four shovel tests in the 6.2-acre project area were dug through clay loam. Three tests were terminated at 100 cm, and one test was terminated at 40 cm when large rocks were encountered. Nine backhoe trenches were dug randomly across the project area with five on the west side of the creek and four on the east side of the creek. The only cultural materials observed were two modern brick fragments and one plain white ware ceramic sherd in Backhoe Trench 1 on the west side of the creek, and one plain white ware ceramic sherd in an exposed area next to the bank of the creek on the east side. The provenience of the artifacts recovered from Backhoe Trench 1 is not known. A careful inspection of the rest of the trench did not result in any additional cultural materials or features. The brick is believed to be the remains of the former filling station. Three of the shovel tests did not encounter any large rocks or caliche. However, large sandstone rocks were uncovered when Shovel Test 3 was expanded with the backhoe, and eight of the nine backhoe trenches encountered caliche at depths varying from 87 cm to 150 cm. The backhoe was used to penetrate at least 30 cm of caliche before ending each trench.

RECOMMENDATIONS

No archaeological sites were found during the survey of the proposed park site. The area where the brick fragments and white ware ceramic sherd was found is not planned for development. It is, therefore, recommended that construction be allowed to proceed as planned by the City of Clyde without further consultation with the Texas Historical Commission. Should the construction plans change to include a greater area that can be viewed as a likely setting for an archaeological site, the Texas Historical Commission must be notified in case additional survey by a professional archaeologist is warranted. This study conformed to the Minimum Survey Standards as defined by the Archaeology Division of the Texas Historical Commission..

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APPENDIX I
SHOVEL TEST LOG

Test	depth	Soil	Results
01	100 cm	clay loam	sterile
02	100 cm	clay loam	sterile
03	40 cm	clay loam	terminated at 40 due to large rocks*
04	100 cm	clay loam	sterile

* two modern brick fragments and one plain white ware sherd were found when the area was excavated with a backhoe

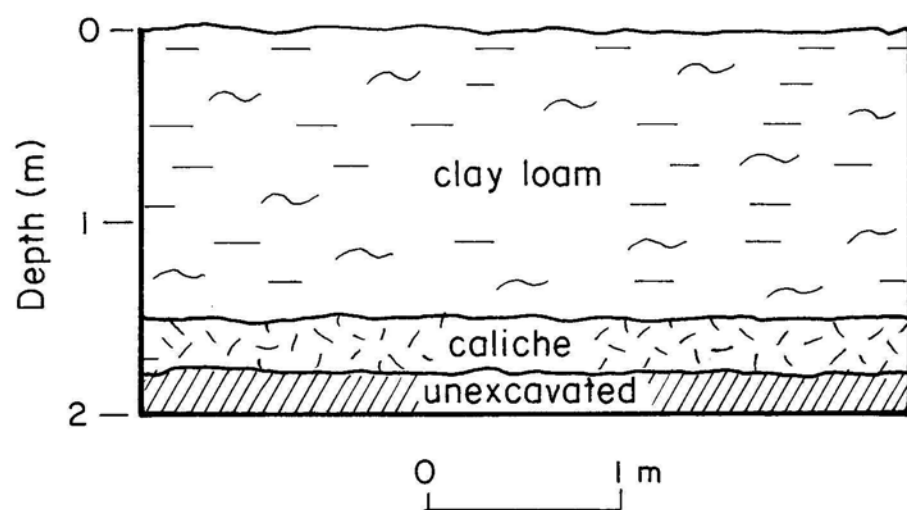
APPENDIX II
BACKHOE TRENCHES*

Trench	depth	Soil	Results
01	129 cm	clay loam	two modern brick fragments and one plain white ware ceramic sherd. terminated at firm clay.
02	180 cm	clay loam	sterile – dug through 30 cm of caliche
03	160 cm	clay loam -	sterile – dug through 30 cm of caliche
04	173 cm	clay loam	sterile – dug through 30 cm of caliche
05	150 cm	clay loam	sterile – dug through 30 cm of caliche
06	140 cm	clay loam	sterile – dug through 30 cm of caliche large limestone rocks encountered
07	130 cm	clay loam	sterile – dug through 30 cm of caliche
08	160 cm	clay loam	sterile – dug through 30 cm of caliche
09	117 cm	clay loam	sterile – dug through 30 cm of caliche

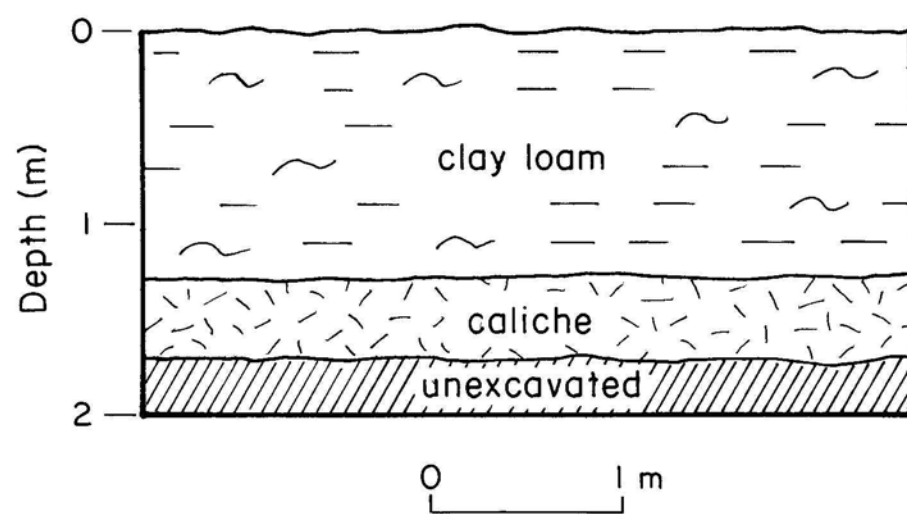
* Each trench was four meters long x 12 inches wide

APPENDIX III
BACKHOE TRENCH PROFILES

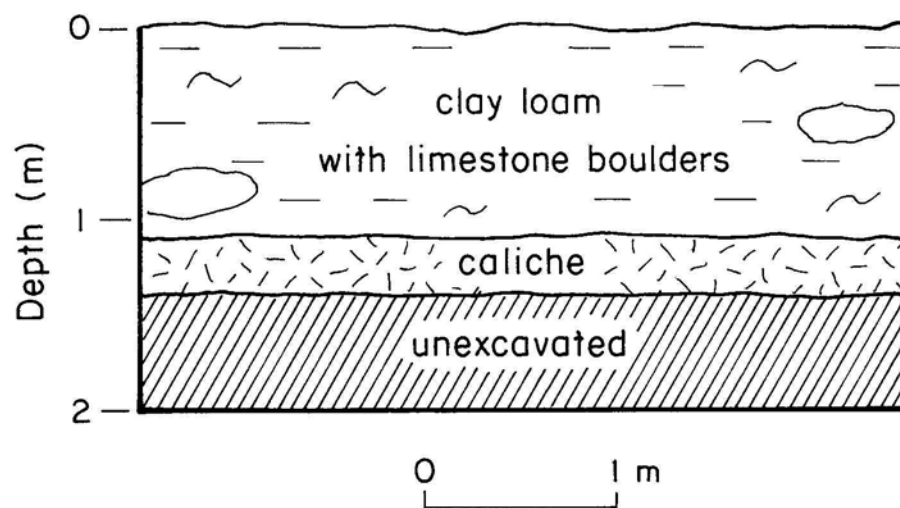
Backhoe Trench 2



Backhoe Trench 3



Backhoe Trench 6



Backhoe Trench 9

